

III. AMENDMENT

i. Introductory Comments

PLEASE ENTER THE FOLLOWING AMENDMENT WITHOUT PREJUDICE OR DISCLAIMER. Applicant reserves the right to file a divisional or continuation application to the originally filed claims.

Please amend the specification as follows:

Please amend the claims as follows:



(ii) Amendment To The Specification:

| TABLE 1 | | |
|--|--------------------------------|-------------|
| Target Human Chromosome or Chromosomes | Probing Nucleobase Sequence | Seq. ID No. |
| X | CTT-CAA-AGA-GGT-CCA-CGA | 1 |
| X | AGG-GTT-CAA-CTG-TGT-GAC | 2 |
| X | GAA-ACT-TCT-GAG-TGA-TGA | 3 |
| X | CAG-TCA-TCG-CAG-AAA-ACT | 4 |
| X | AGA-TTT-CAC-TGG-AAA-CGG | 5 |
| X | GTT-ATG-GGA-AGG-TGA-TCC | 6 |
| X | TCG-AGC-CGC-AGA-GTT-TAA | 7 |
| X | CTA-TTT-AGC-GGG-CTT-GGA | 8 |
| X | TAC-AAG-GGT-GTT-GCA-AAC | 9 |
| Y | CCA-TAT-GCA-GTT-ATA-AGT-AGG | 10 |
| Y | TAT-TGT-ACC-AAG-CAG-AGT-ACC | 11 |
| Y | GGT-ATA-TAT-AAG-ATG-ACA-CAG-GA | 12 |
| Y | GTT-AGT-TAT-ATT-GGG-TGA-TAT-GT | 13 |
| Y | TCA-CAT-AAT-AGA-CAA-CAT-AC | 14 |
| Y | CAG-AAG-AGA-TTG-AAC-CTT | 15 |
| Y | GGC-ATA-GCA-CAT-AAC-ATG | 16 |
| 1 | AAT-CGT-CAT-CGA-ATG-AAT | 17 |
| 1 | CAT-TGA-ACA-GAA-TTG-AAT | 18 |
| 2 | GTT-TTC-AGG-GGA-AGA-TAT | 19 |
| 2 | TGT-GCG-CCC-TCA-ACT-AAC | 20 |
| 2 | GAA-GCT-TCA-TTG-GGA-TGT | 21 |
| 2 | CCA-ATA-AAA-GCT-ACA-TAG-A | 22 |
| 2 | GAA-AAA-GTT-TCT-GAC-ATT-GC | 23 |
| 2 | TAG-TTG-AAG-GGC-ACA-TCA | 24 |
| 2 | CAC-AAA-TAA-GAT-TCT-AAG-AAT | 25 |
| 2 | TCA-AAA-GAA-TGC-TTC-AAC-AC | 26 |
| 3 | ATA-ATT-AGA-CCG-GAA-TCA-T | 27 |
| 3 | GCT-GTT-TTC-TAA-AGG-AAA-G | 28 |
| 3 | AAG-ACT-TCA-AAG-AGG-TCC | 29 |
| 3 | TTT-GTC-AAG-AAT-TAT-AAG-AAG | 30 |
| 3 | CAA-GAT-TGC-TTT-TAA-TGG | 31 |
| 3 | TGT-GTA-TCA-ACT-CAC-GGA | 32 |
| 3 | CCT-CAC-AAA-GTA-GAA-ACT | 33 |
| 3 | GAA-AAA-GCA-GTT-ACT-GAG | 34 |
| 3 | TAA-TAA-TTA-GAC-GGA-ATC-AT | 35 |
| 3 | TTA-CAG-GGC-ATT-GAA-GCC | 36 |
| 3 | CAG-TTA-TGA-AGC-AGT-CTC | 37 |
| 3 | CAC-ACC-AGA-AAA-AGC-AGT | 38 |
| 3 | AAG-GGT-AAA-CAC-TGT-GAG | 39 |

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| 3 | AGA-CAA-CGA-AAT-ATC-TTC-ATG | 40 |
| 3 | CTA-GCA-GTA-TGA-GGT-CAA | 41 |
| 3 | GCA-GAC-TTC-AGA-AAC-AGA | 42 |
| 3 | GGC-CTC-AAA-GAC-GTT-TAA | 43 |
| 3 | GTG-AAA-GTT-CCA-AGT-GAA | 44 |
| 3 | GAG-TGC-TTT-GAA-GCC-TAC | 45 |
| 3 | GAA-ACA-GCA-GAG-TTG-AAA | 46 |
| 3 | TGC-AGA-GAT-CAC-AAC-GTG | 47 |
| 3 | ACA-AAG-AAT-CAT-TCG-CAG | 48 |
| 3 | AGT-GTT-AGA-AAA-CTG-CTC | 49 |
| 4 | ACA-CGA-TTT-TGG-AAA-CAC | 119 |
| 4 | CGA-AAC-ATC-ACT-GAG-AGT | 120 |
| 4 | GGA-TGA-CAT-ATA-ATA-ACT-AG | 121 |
| 4 | GAA-TTG-AAC-ATT-CAC-TTT-GA | 122 |
| 4 | TAG-CTC-TGA-AGA-TTT-CGT | 123 |
| 4 | GAG-ATG-TTT-CCG-AGA-ATG | 124 |
| 4 | GTG-TAT-TCA-ACT-ACC-AGA | 125 |
| 4 | ACA-TTT-CTG-TTA-CAG-AGC | 126 |
| 4 | ATG-ACG-TAT-AAA-ATC-TAG-AG | 127 |
| 4 | ACG-AAC-ACA-GTT-GAA-CCT | 128 |
| 4 | CTC-ATA-AAA-ACC-AGA-AAG-AG | 129 |
| 6 | CTG-TTC-AGA-GTA-ACA-TGA | 50 |
| 6 | CCG-CTT-GGA-AAT-ACT-ACA | 51 |
| 6 | GAA-ATG-GAA-ATA-TCT-CCC-C | 52 |
| 6 | TCT-AGG-AGG-TCC-AAT-TAT | 53 |
| 6 | GAA-TTC-CCA-AGT-GGA-TAT | 54 |
| 6 | CTG-TAG-GTT-TAG-ATG-AAG | 55 |
| 6 | AAG-GAG-TGT-TTC-CCA-ACT | 56 |
| 6 | GGC-TTC-AAG-GCG-CTC-TAA | 57 |
| 6 | GCA-GAG-ACT-TCA-AAG-TGC | 58 |
| 6 | CAC-ACA-CAC-GGT-GGA-CCA | 59 |
| 6 | CAA-AGG-GAA-TGT-TCC-ATT | 60 |
| 6 | CAC-ATA-GCA-GTG-TTT-GAG | 61 |
| 6 | CTC-AAG-GCG-GTC-CAA-TTA | 62 |
| 6 | GAG-TCG-AAA-TGC-ACA-CAT | 63 |
| 6 | TAC-CAA-GAG-GAA-TGT-TGC | 64 |
| 7 | CAG-TTC-ATA-TGT-GCA-GTG | 130 |
| 7 | GGA-ATA-TCG-TCA-CCT-AAA | 131 |
| 7 | TGG-AGC-AAA-TTG-AAG-CCT | 132 |
| 7 | TGG-AGC-ACA-TTT-ATG-CCT | 133 |
| 7 | TGC-ATT-CTA-CTC-CCA-TAG | 134 |
| 7 | ACA-CTC-TGT-TTC-TAA-AAT-CT | 135 |
| 7 | GCA-GGC-GGA-TAT-TTA-GTA | 136 |
| 7 | AGC-GAT-TTG-ATG-CCA-ACA | 137 |
| 7 | TTG-CAA-ACG-GGG-TTT-CTT | 138 |

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| 7 | CTT-TCA-TGC-TAG-ACA-GAA | 139 |
| 7 | CAA-AAA-AGT-TAC-TGA-GAA-C | 140 |
| 7 | AAA-ATG-CCA-CAG-CAA-GAG | 141 |
| 7 | GTT-TGA-AAA-CAC-ACT-GTT-TG | 142 |
| 7 | ATA-TGG-ACC-TGT-TTG-AGG | 143 |
| 7 | CAT-TGA-ATG-CTA-GAC-GGA | 144 |
| 8 | ACG-GGA-TGC-AAT-ATA-AAA | 65 |
| 8 | TGA-AGA-TTC-TGC-ATA-CGG | 66 |
| 8 | AAG-GTT-TGT-ACT-GAC-AGA | 67 |
| 8 | CTG-AAC-TAT-GGT-GAA-AAA | 68 |
| 8 | ACT-AAC-TGT-GCT-GAA-CAT | 69 |
| 8 | CCC-ATG-AAT-GCG-AGA-TAG | 70 |
| 9 | ATG-ATG-AAA-AAG-GTA-ATA-E | 145 |
| 9 | CAT-TCT-CAG-AAC-TGT-TTG-E | 146 |
| 10 | AAC-TGA-ACG-CAC-AGA-TGA | 71 |
| 10 | GGC-TAA-TCT-TTG-AAA-TTG-AAA | 72 |
| 10 | AGG-TGG-ATA-ATT-GGC-CCT | 73 |
| 10 | TGA-AGT-CCA-AAA-AAG-CAC | 74 |
| 10 | CTT-AGA-CAT-GGA-AAT-ATC | 75 |
| 10 | AAG-GGG-TCT-AAC-TAA-TCA | 76 |
| 10 | GTA-GTT-GTT-GAG-AAT-GAT | 77 |
| 11 | AAC-TTC-CCA-GAA-CTA-CAC | 78 |
| 11 | ATT-CTT-GAA-ATG-GAA-CAC | 79 |
| 11 | CTG-TGA-TTG-CTG-ATT-TGG | 80 |
| 11 | GTC-ATC-ACA-GGA-AAC-ATT | 81 |
| 11 | GAA-ATT-TCC-TGT-TGA-CAG-A | 82 |
| 11 | GTT-TGA-AAG-CTG-AAC-TAT-G | 83 |
| 12 | TCC-TGT-AAT-GTT-CGA-CAG | 84 |
| 12 | TCA-TAG-AAC-GCT-AGA-AAG | 85 |
| 12 | ACC-TTT-CTT-TTG-ATG-AAG-GA | 86 |
| 12 | CAA-ATA-TCA-CAA-AAA-GAG-GG | 87 |
| 12 | GAG-TTG-AAT-AGA-GGC-AAC | 88 |
| 12 | GGC-CAA-ATG-TAG-AAA-AGG | 89 |
| 12 | GCG-TTC-AAC-TCA-AGG-TGT | 90 |
| 12 | TGT-CCT-TTA-GAC-AGA-GCA | 91 |
| 12 | TGA-GAC-CAA-ATG-TAC-AAA-AG | 92 |
| 12 | GAA-TAC-TGA-GTA-AGT-TCT-TTG | 93 |
| 12 | AAC-TGC-ACA-AAT-AGG-GTG | 94 |
| 12 | TGG-AGA-CAC-TGT-GTT-TGT | 95 |
| 12 | CCA-GTT-GGA-GAT-TTC-AAT | 96 |
| 16 | GAA-GCC-TGC-CAG-TGG-ATA | 97 |
| 16 | TAC-AGC-ATT-CTG-GAA-ACC | 98 |
| 16 | CCA-GAC-ACT-GCG-TAG-TGA | 99 |
| 16 | ATA-TAA-TGC-TAG-AGG-GAG | 100 |
| 16 | AAA-AAC-AAG-ACA-AAC-TCG | 101 |

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| 17 | ATT-TCA-GCT-GAC-TAA-ACA | 102 |
| 17 | AAC-GAA-TTA-TGG-TCA-CAT | 103 |
| 17 | GGT-GAC-GAC-TGA-GTT-TAA | 104 |
| 17 | TTT-GGA-CCA-CTC-TGT-GGC | 105 |
| 17 | AAC-GGG-ATA-ACT-GCA-CCT | 106 |
| 17 | TTT-GTG-GTT-TGT-GGT-GGA | 107 |
| 17 | AGG-GAA-TAG-CTT-CAT-AGA | 108 |
| 17 | ATC-ACG-AAG-AAG-GTT-CTG | 109 |
| 17 | CCG-AAG-ATG-TCT-TTG-GAA | 110 |
| 17 | AAA-GAG-GTC-TAC-ATG-TCC | 111 |
| 18 | TTC-CCG-TAA-CAA-CTA-TGC | 112 |
| 18 | TCC-CGT-AAC-AAC-TAG-GCA | 113 |
| 18 | AAA-AGG-AGT-GAT-CCA-ACC | 114 |
| 18 | TCC-CTT-TGG-TAG-AGC-AGG | 115 |
| 18 | ATT-TGA-GAT-GTG-TGT-ACT-CA | 116 |
| 18 | GCA-CTT-ACC-GGC-CTA-AG | 117 |
| 18 | CTC-AGA-AAC-TTA-CTC-GTG | 118 |
| 20 | ACA-GAA-CTA-AAC-CAT-CGT | 147 |
| 20 | TAG-GCC-AGC-TTG-GAG-GAT | 148 |
| 20 | CTA-GCT-GGG-AGG-ATT-T | 149 |
| 20 | TGT-GCC-TCA-ACT-GAC-A-E | 150 |
| 20 | TGC-TTT-GGG-ATG-TTT-CAA | 151 |
| 20 | GCA-ATG-TCA-GAA-CTT-TTT-TC | 152 |
| 13/21 | CCG-AAA-GAA-ATT-TGT-GGG | 153 |
| 13/21 | GAA-CAT-GGC-CTT-TCA-TAG | 154 |
| 13/21 | TCA-AGG-CGA-TCG-AAA-TGT | 155 |
| 13/21 | GAG-ACA-CAT-ATC-ACC-AAC | 156 |
| 13/21 | CAG-AAA-TTT-CTT-TCG-GAT-A | 157 |
| 13/21 | GAA-CAT-GGC-CTT-TCA-TAG | 158 |
| 13/21 | AGC-CAA-AGG-AGT-TGA-ACA | 159 |